

## Piwo 45

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- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **28**
- SRM **5.9**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **50 min**
- Evaporation rate **10 %/h**
- Boil size **18.7 liter(s)**

### Fermentables

| Type           | Name      | Amount        | Yield  | EBC |
|----------------|-----------|---------------|--------|-----|
| Liquid Extract | Acid Malt | 2.5 kg (100%) | 78.7 % | 15  |

### Hops

| Use for             | Name            | Amount | Time     | Alpha acid |
|---------------------|-----------------|--------|----------|------------|
| Boil                | Marynka         | 15 g   | 50 min   | 7 %        |
| Aroma (end of boil) | Hallertau Blanc | 15 g   | 15 min   | 9.8 %      |
| Whirlpool           | Cascade         | 50 g   | 1 min    | 6 %        |
| Dry Hop             | Hallertau Blanc | 50 g   | 4 day(s) | 9.8 %      |

### Yeasts

| Name           | Type  | Form  | Amount | Laboratory |
|----------------|-------|-------|--------|------------|
| Saflager S-189 | Lager | Slant | 200 ml | Fermentis  |

### Extras

| Type  | Name       | Amount | Use for  | Time |
|-------|------------|--------|----------|------|
| Other | glukoza    | 47 g   | Bottling | ---  |
| Other | witamina c | 4 g    | Bottling | ---  |